

Courese Overview

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1 Unit One: Motion and Forces

1.1 Lesson One: Motion in One and Two Dimensions

1.1.1 vocabulary

term	lesson	page	definition
frame of reference	Lesson 1		a system for specifying the precise location of objects in space and time
vector	Lesson 1		a physical quantity that has both magnitude and a direction
velocity	Lesson 1		the speed of an object in a particular direction
acceleration	Lesson 1		the rate at which velocity changes over time; an object accelerates if its speed
gravity	Lesson 1		a force of attraction between objects that is due to their masses and that dec
force	Lesson 2		an action exerted on an object that may change the object's state of rest or m
friction	Lesson 2		a force that opposes motion between two surfaces that are in contact
normal force	Lesson 2		a force that acts on an object lying on a surface and acts in a direction perpe
weight	Lesson 2		a measure of the gravitational force exerted on an object; its value can chang
tradeoff	Lesson 3		the giving up of one thing in return for another, often applied to the engineer
iterate	Lesson 3		to do again or repeat; in design testing, the results of each repetition are used
criteria	Lesson 3		(plural, criteria) the specific requirements and standards a design must meet;
constraint	Lesson 3		a restriction or limitation; in engineering design, a limitation that a design or
decision matrix	Lesson 3		a decision-making tool for evaluating several options at the same time
prototype	Lesson 3		a test model of a product
stress	Lesson 3		the force per unit area within an object; the internal resistance of an object t